Patent Number(s): JP63101491-A; JP95062152-B2

Title: Detergent compsn. contg. alkali protease - produced by bacillus species Y and an alkali builder with specified acid dissociation constant range

Patent Assignee(s): LION CORP (LIOY)

Derwent Primary Accession No.: 1988-164153

Abstract: A new detergent compsn. contains the alkali protease produced by Bacillus sp. Y (donated to Biko-ken, No. 1029) and an alkali builder with an acid dissociation constant, pKa, of 9 or greater.

USE/ADVANTAGE - The compsn. has notably improved detergency and undergoes little redn. in the enzyme activity during prolonged storage: prepd. samples showed detergencies (based on the reflection ratio) of 68-76% and survival rates of enzyme activity (after 2-week storage at 35 deg.C) of 60-80% compared with 61-74% and 0-80%, respectively, for comparison samples.

In an example, patent No. 60123021 describes the strain, which produces enzymes Ya and Yb. The blend ratio is typically 50-10,000 APU/kg (pref. 1,000-5,000 APU/kg). Available alkali builders include diethanol amine (pKa = 8.90), mono-ethanol amine (pKa = 9.52), Na2CO3 (pKa = 10.33) and sodium silicate (pKa = 13.1). The blend ratio is pref. 3-20 wt.% (more pref. 5-15 wt.%).

Equivalent Abstracts: (JP95062152-B2) A new detergent compsn. contains the alkali protease produced by Bacillus sp. Y (donated to Biko-ken, No. 1029) and an alkali builder with an acid dissociation constant, pKa, of 9 or greater.

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International Patent Classification: C11D-003/38; C11D-003/386; C12N-009/54; C12R-001:07

Derwent Class Code(s): <u>D25</u> (Detergents other than soap); <u>D16</u> (Fermentation industry)

Derwent Manual Code(s): <u>D05-C03C</u>; <u>D11-B02</u>; <u>D11-B03</u>

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